

Date: Thursday, 5/10/2007 2:36:00 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: CROSSTUBE EXTRUSION (407 AFT)
Job Number	: 32307		
Estimate Number	: 11978		
P.O. Number	: <i>N/A</i>	Part Number	: D6011115
This Issue	: 5/10/2007 S.O. No. : <i>N/A</i>	Drawing Number	: D6011 REV A
Prsht Rev.	: <i>NC</i>	Project Number	: <i>N/A</i>
First Issue	: <i>N/A</i> Type : LANDING GEAR	Drawing Revision	: <i>A</i>
Previous Run	: <i>N/A</i>	Material	: <i>N/A</i>
Written By	: <i>[Signature]</i>	Due Date	: 10/30/2007
Checked & Approved By	: <i>[Signature]</i> 07.05.10	Qty:	20 Um: Each
Comment	: Est Rev:A 01.08.17 New Issue SM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: *3761**C20710511 (20)*

- a) Order as per Dwg D6011
- b) Material: 2.750 x 0.650 wall 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11) seamless aluminum tube
- c) Minimum ultimate tensile strength = 77 ksi
- d) Minimum tensile yield strength = 66 ksi
- e) Tolerance are per ASTM B210 (see details on Dwg D6011)
- f) Material certification required

2.0	D6011115P	Crosstube Material
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 20.0000 Each(s)
 Crosstube Material

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
 Receive & Inspect For Transit Damage
 Ensure material certification is attached

C2110/26 (22)

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK
 Ensure Material certification comply to Dwg

*07.10.27**(22)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 09/11/12
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: CROSSTUBE EXTRUSION (407 AFT)

Job Number: 32307

Part Number: D6011115

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

N/A [Signature]
07-11-01

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: Mach.

[Signature] 07-11-01 20

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(20)
D6011115

Job Completion



U 07-11-02

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

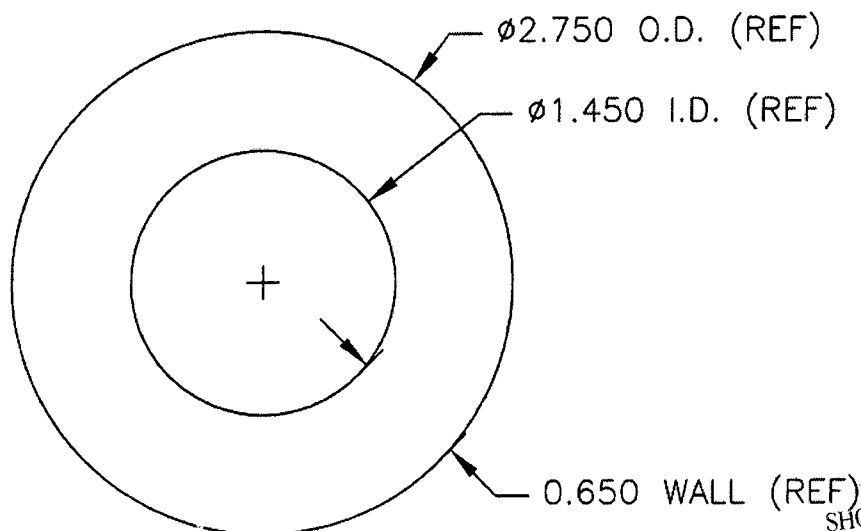
NOTE: Date & initial all entries



DESIGN #	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D6011	REV. A SHEET 1 OF 1
DATE 01.08.16		TITLE CROSSTUBE MATERIAL	SCALE 1:1
A	01.08.16	NEW ISSUE	
A1	02.01.29	UPDATE TOLERANCE ON OD.	

SPECIFICATION CONTROL DRAWING


RELEASED
01.08.17



NOTES

- 1) D6011-XXX CROSSTUBE
LENGTH

WHERE XXX IS LENGTH IN INCHES
EG, 115" LONG TUBE: D6011-115

- 2) MATERIAL: 2.750 OD x 0.650 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ~~ASTM B210 AS FOLLOWS~~ ANSI H35.2 AS FOLLOWS 
O.D.: ~~± 0.006 MEAN (± 0.012 INCLUDING OVALITY)~~ ± 0.015 MEAN (± 0.030 INCL. OVALITY)
WALL: ± 0.020 MEAN (± 0.065 INCLUDING ECCENTRICITY)
LENGTH: XXX +0.125/-0.000
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 32307

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ALUnna

Abnahmeprüfzeugnis 3.1 - EN 10204:2004**Inspection Certificate 3.1 - EN 10204:2004 / Certificat de Reception 3.1- EN 10204:2004****Kunde:** Dart Aerospace Ltd.**Client:**1270 Aberdeen Street
K6A1K7 Hawkesbury, ON Canada**Zeugnisnummer:** 1008/07**Cert No. / No. du certificat:****Bestellnummer:** PO00003761**Order No. / No. de commande****Auftrag:** 25006/4**Reference/Notre Reference:****Produkt:** Rohre nahtlos gepresst**Product / Produit:** Tubes seamless extruded

Tubes file sur aiguille

Spezifikation: AMS - QQ - A - 200/11E; -**Specification:****Werkstoff:** EN AW-7075**Alloy/Alliage:** 3.4365**Zustand:** T 6511**Temper/État****Abmessung:** 2,750 INCH x 1,450 INCH x 0,650 INCH x 115,00 INCH**Size / Dimension**

buff finish

Kennzeichnung**Marking/Marquage:**ALUnna - Cert No. 1008/07 - 7075 - T 6511 Cast No. 01706073 - AMS QQA 200/11 - 2.750" OD X 0.650" Wall -
Heat No. 947/09 - Lot 25006/4-1 PO 00003761**Lieferung:**

Stück/pcs.

kg/kgs

Delivered Material / Matériel délivré:

22

499,00

1. Chemische Analyse**Chemical Analysis / analyse chimique**

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni
Charge/ min.			1,2		2,1	0,18	5,1						
Cast No. max.	0,40	0,50	2,0	0,30	2,9	0,28	6,1	0,20					
01706073	0,12	0,28	1,48	0,04	2,5	0,18	5,95	0,03	0	0,01			

Elemente ohne Angabe < 0,01 % / Elements without indication < 0,01 %

2. Mechanische Eigenschaften**Mechanical Properties / Valeurs Mécaniques**

Anforderungen Specification	Rm N/mm ²	Rp0,2 N/mm ²	A %	A 50 %	HB	Heat No.
min:	531	455				
max:						
1	576	533		10,0		947/09 - 22 pcs.
2	573	528		12,0		

RMS outside 25 - max. 17,8 µ"

**Ergebnis der
Prüfung:**Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der
Bestellannahme entspricht**Test results:**

We confirm that the delivery has been tested and applies to the agreements made on receipt of the order

Resultats:

Nous confirmons que la livraison a été contrôlée et correspond avec les conventions faites à la réception de la commande

Zertifiziert nach DIN EN ISO 9001:2000, gültig bis 2009-03-27
Zertifiz. Register No.: 001050 OM